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February 12, 2004

Ms. Marlene Dortch  
Office of the Secretary  
Federal Communications Commission  
445 Twelfth Street  
TW A325  
Washington, D.C. 20554

RECEIVED

FEB 12 2004

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

**Re: Amendment of Section 73.202(b)  
Table of Allotments  
FM Broadcast Stations  
MB Docket No. 02-136; RM-10458,  
RM-10663, RM-10667, RM-10668**

Dear Ms. Dortch:

Transmitted herewith on behalf of Mercer Island School District is an original and four copies of its Motion for Leave to File Supplement for submission in the above-referenced matter.

Should any questions arise concerning this matter, please contact this office directly

Respectfully submitted,

  
Howard J. Barr

Enclosure

cc: Service List

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Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

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Astoria, Gladstone, Tillamook, Springfield-	)	RM-10667
Eugene, Coos Bay, Manzanita and Hermiston,	)	RM-10668
Oregon and Covington, Trout Lake, Shoreline,	)	
Bellingham, Forks, Hoquiam, Aberdeen, Walla	)	
Walla, Kent, College Place, Long Beach, Ilwaco	)	
and Trout Lake, Washington	)	

To: Chief, Allocations Branch

**MOTION FOR LEAVE TO FILE SUPPLEMENT TO PETITION TO DENY**

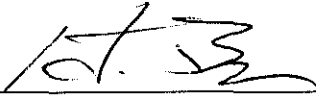
Mercer Island School District ("Mercer Island"), by counsel, hereby moves for Commission consent to file a Supplement to its comments with respect to the above-referenced matter. The Supplement seeks to provide the Commission with additional information relevant to a full consideration of the proposals before it in the public interest. Accordingly, it is respectfully submitted that good cause exists for acceptance of the Supplement.

A copy of the Supplement, previously submitted on February 2, 2004, is attached.

Mercer Island respectfully requests that this Motion be accepted *nunc pro tunc*.

Respectfully submitted,

**MERCER ISLAND SCHOOL DISTRICT**

By:   
Howard J. Barr  
Its Counsel

**WOMBLE CARLYLE SANDRIDGE & RICE, PLLC**

1401 Eye Street, N.W.  
Seventh Floor  
Washington, D.C. 20005  
(202)857-4506

February 12, 2004

**CERTIFICATE OF SERVICE**

I, Howard J. Barr, do hereby certify that I have on this 12<sup>th</sup> day of February, 2004, caused to be hand delivered or mailed via First Class Mail, postage prepaid, copies of the foregoing Motion for Leave to File Supplement to the following:

John A. Karousos \*  
Chief, Allocations Branch  
Policy and Rules Division  
Mass Media Bureau, Room 3-A266  
Federal Communications Commission  
The Portals  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

R. Barthen Gorman \*  
Audio Division  
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Federal Communications Commission  
The Portals  
445 12<sup>th</sup> Street, S.W.  
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Mr. Robert Casserd  
4735 N.E. 4<sup>th</sup> Street  
Renton, WA 98059

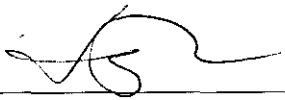
Ms. Gretchen W. Wilbert  
Mayor, City of Gig Harbor  
3105 Judson Street  
Gig Harbor, WA 98335

Mr. Ron Hughes, President  
Westend Radio, LLC  
2950 Church Street  
Baker City, OR 97814

Oregon Eagle, Inc.  
P.O. Box 40  
Tillamook, OR 97141

Mr. Rod Smith  
13502 NE 78<sup>th</sup> Circle  
Vancouver, WA 98682

Mr. Merle E. Dowd  
910 S. Fortuna Drive, #8415  
Mercer Island, WA 98040

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Howard J. Barr

\* Hand Delivered

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February 2, 2004

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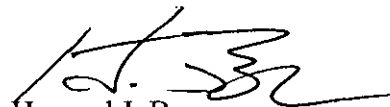
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Should any questions arise concerning this matter, please contact this office directly

Respectfully submitted,

  
Howard J. Barr

Enclosure

cc: Service List

**Before the  
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Washington, D.C. 20554**

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Bellingham, Forks, Hoquiam, Aberdeen, Walla	)	
Walla, Kent, College Place, Long Beach, Ilwaco	)	
and Trout Lake, Washington	)	

To: Chief, Allocations Branch

**SUPPLEMENT**

Mercer Island School District ("Mercer Island"), by counsel, hereby submits its Supplement in the above-captioned matter.<sup>1</sup> The following is shown in support thereof:

**I. BACKGROUND**

KMIH(FM) has been licensed by the Federal Communications Commission ("FCC" or "Commission") since 1970, and has been owned and operated by the Mercer Island School District ("Mercer Island") over the duration of its existence. The station is a working laboratory for high school students, on the air 24 hours a day at 104.5 FM (channel 283), providing students a springboard into the world of radio broadcasting, and media in general.

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<sup>1</sup> In a separately filed Motion, Mercer Island respectfully requests acceptance of this submission.



KMIH(FM) is presently classified as a "Class D" FM station. Current FCC rules define Class D stations as stations with transmitter power output ("TPO") of 10 watts or less.<sup>2</sup>

The Commission awarded Class D licenses until 1978. Then, choosing to "str[ike] the balance in favor of licensing higher-powered stations to ensure that large audiences were served"<sup>3</sup> the Commission adopted a ban on the further award of Class D licenses and devised a plan, the goal of which was to move as many 10-watt stations as possible to open space on commercial channels. The plan involved giving Class D stations several alternatives. First, Class D stations were encouraged to upgrade to Class A status. Those not upgrading were to move to open space on commercial channels or to newly created FM Channel 200. Those unable to migrate were to move to the least preclusive noncommercial channel.<sup>4</sup> The Commission also ended Class D stations' protection against interference. Class D stations are now considered as secondary services and are not entitled to protection from full-service FM stations.<sup>5</sup>

KMIH(FM) was originally licensed to operate on 90.1 MHz with 10 watts of power. In furtherance of the Commission's mandate, in June of 1992 Mercer Island applied for authority to relocate KMIH(FM) to the commercial band (on its current 104.5 MHz) and was granted such authority in December of that year. Construction of the facility was completed in the spring of 1993.

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<sup>2</sup> See 47 C.F.R. §73.506(a), §73.506(a) of the Commission's rules.

<sup>3</sup> See *Creation of a Low Power Radio Service*, 15 FCC Rcd 19,208, 19,236 (2000) (reconsideration) (discussing *Changes in the Rules Relating to Noncommercial Educ. FM Broad. Stations*, 70 FCC 2d 972, 983 (1978) (codified at 47 C.F.R. §73.512(d), §73.512(d) of the Commission's rules)).

<sup>4</sup> See *Changes in the Rules Relating to Noncommercial Educ. FM Broad. Stations*, 70 FCC 2d 972, 974 (1978)

<sup>5</sup> *Creation of a Low Power Radio Service*, 19 CR 2055, para. 27, n.37 (1999).

The station now operates on 104.5 MHz with 30 watts of power and a 60 dBu (signal strength) contour that stretches over 6 Km from the transmitter site.<sup>6</sup> Because the station operates with greater than “maximum” facilities for its class, it is considered to be a “Superpowered” Class D station. The Commission has stated that it is aware of five Superpowered Class D stations.<sup>7</sup> With its current facilities, KMIH(FM) is the functional equivalent of a fully protected, i.e. primary, Class A FM facility.

A Class A FM station is considered to be a station with a minimum effective radiated power (“ERP”) of 100 watts (0.1 kW).<sup>8</sup> A Class A station may, however, have an ERP of less than 100 watts provided that its 60 dBu contour equals or exceeds 6 kilometers.<sup>9</sup> While KMIH(FM) operates at less than 100 watts, the Engineering Statement demonstrates that its 60 dBu contour equals or exceeds 6 km.<sup>10</sup> Nevertheless, KMIH(FM) is still considered by the Commission to be a Class D secondary service with no interference protection rights.

Notwithstanding KMIH(FM)’s longstanding history of service in the public interest, KMIH(FM) now stands at the precipice.

In 2001, Mid-Columbia Broadcasting Inc., in partnership with First Broadcasting (“Joint Petitioners”), initiated this proceeding via their petition for rulemaking proposing to

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<sup>6</sup> Exhibit A, Engineering Statement of Doug Vernier.

<sup>7</sup> 1998 Biennial Regulatory Review – Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission’s Rules, 13 FCC Rcd 14849, para. 64 (1998). The Commission “propose[d] to grandfather such superpowered Class D facilities, permitting them to continue to operate as Class D stations at their present power and antenna height and to modify their facilities provided they do not extend their predicted 60 dBu contour distances.” *Id.* The Commission has yet to act on this proposal. See 1998 Biennial Review – Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission’s Rules, 22 CR 612, para. 45 (2000).

<sup>8</sup> 47 C.F.R. §73.211(a)(1), §73.211 (a)(1) of the Commission’s rules.

<sup>9</sup> 47 C.F.R. §73.211(a)(3), §73.211 (a)(3) of the Commission’s rules.

<sup>10</sup> See Section 72.215(b)(2)(iv) of the Commission’s rules.

move KMCQ, at a frequency of 104.5, from its current community of license, The Dalles, Oregon, some 130 miles to Covington, Washington, a Seattle suburb located within the Seattle Urbanized Area and approximately 16 miles from Mercer Island.<sup>11</sup>

Grant of either proposal will almost certainly result in the death of KMIH(FM); not only to the detriment of the students at Mercer Island but to the community at large which has come to rely on KMIH(FM) for their local news, sports and entertainment. The following Arbitron ratings information demonstrates that KMIH(FM) is more than just a footnote on the local radio horizon. Rather, it provides reliable statistical evidence regarding the number of people who rely on the station. According to Arbitron Fall 2003 Top-Line Estimates KMIH achieved the following ratings:<sup>12</sup>

Metro Survey Area				Total Market		
AQH Persons (00) 10	AQH Survey % 0.2	Cume Persons(00) 411	Cume Rating % 1.3	AQH Persons (00) 10	Cume Persons (00) 411	Avg. TSL (hrs.3.1

The following table represents the station's average ratings for the last three ratings periods:<sup>13</sup>

Metro Survey Area				Total Market		
AQH Persons(00) 10.6	AQH Survey % 0.13	Cume Persons(00) 318	Cume Rating % 1.03	AQH Persons(00) 10.6	Cume Persons (00) 318	Avg. TSL (hrs.)4.4

<sup>11</sup> The proposal was later amended to relocate the station to the equally distant Seattle suburb of Kent, Washington which is located approximately 12 miles from Mercer Island.

<sup>12</sup> Exhibit B hereto.

<sup>13</sup> Exhibit C hereto.

Mercer Island opposed this proposal as well as the counterproposal of Triple Bogey, LLC, MCC Radio, LLC and KDUX Acquisition, LLC ("Counterpetitioners"), who proposed, among other things, the re-location of KDUX-FM from Aberdeen, Washington to Shoreline, Washington (another move-in to a community within the Seattle Urbanized Area) and a change in channel from 284C2 to 283C2.

In lieu thereof, Mercer Island proposed that the Commission adopt a special allocation granting KMIH(FM) the equivalent of Class A status and protection in accordance with the Class A minimum distance separations on channel 283 at Mercer Island, Washington.<sup>14</sup> Mercer Island's comments and other submissions in this docket fully demonstrate that grant of its proposal will best serve the public interest and will result in the most preferential arrangement of allotments.<sup>15</sup> This Supplement demonstrates that grant of Mercer Island's proposal is consistent with and can be accomplished within the confines of the Commission's rules

## **II. THE COMMISSION SHOULD GRANT/ESTABLISH AN ALLOTMENT FOR KMIH(FM) AT MERCER ISLAND, WASHINGTON ON CHANNEL 283A**

The Commission's minimum distance separation rules require a 165 km spacing between a Class A station and a first adjacent Class C station.<sup>16</sup> Under that standard, KMIH is short spaced to KAFE(FM), Bellingham, Washington by 33 kilometers.<sup>17</sup> This condition,

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<sup>14</sup> As the licensee of the station, Mercer Island will apply for the channel and construct the facility as authorized.

<sup>15</sup> The Commission's policies require that any reallocation proposal result in a preferential arrangement of allotments. See *Amendment of the Commission's Rules Regarding Modification of FM and TV Authorizations to Specify a New Community of License*, 4 FCC Rcd 4870 (1989), *recon. granted in part*, 5 FCC Rcd 7094 (1990) ("Change of Community").

<sup>16</sup> Section 73.207 of the Commission's rules.

<sup>17</sup> According to the Commission's records, KAFE(FM) is located at coordinates 48-40-48 NL, 122-50-24 WL while KMIH(FM) is located at coordinates 47-34-21 NL, 122-13-01 WL. A distance of 132 km.

however, has been in existence since 1992 when the Commission first granted KMIH(FM) permission to relocate to channel 283.

The Commission will permit short spaced assignments as long as the application therefore proposes contour protection.<sup>18</sup> Contour protection is deemed to exist where the predicted interfering contour of the proposed station does not overlap the protected contour of other short spaced stations and where the predicted interfering contours of other short spaced assignments do not overlap the predicted protected contour of the proposed station.

Under the rules, the F(50/50) field strength along the protected contour is 1 mV/m (60 dBu) while the interfering contour is 6 dB lower than the F (50/50) field strength along the protected contour for which overlap is prohibited (54 dBu).<sup>19</sup> As shown in the attached Engineering Statement, using the FCC methodology, the KAFE(FM) 54 dBu contour approximately bisects the KMIH(FM) 60 dBu protected contour. Mercer Island submits, however, that the results of this study are not reflective of real world conditions.

Because of the way the Commission's methodology considers terrain, in this case, it fails to generate real world interference signal contours. The Commission's methodology assumes the terrain along the path will fall into the norm assumed when the tables were originally conceived and the terrain beyond 16 kilometers from the transmitter is not considered. Because of the way the Commission considers terrain, the attenuating impact of drastically changing terrain and mountains and hills beyond 16 kilometers is ignored and, in this case, it fails to generate real world interference signal contours.

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<sup>18</sup> Section 73.215 of the Commission's rules.

<sup>19</sup> Section 73.215 (a) (1) and (2) of the Commission's rules.

Mercer Island demonstrates that, in this case, use of the Longley-Rice Irregular Terrain Model ("Longley-Rice") is appropriate as an alternative prediction model.<sup>20</sup> The Commission employed this methodology in determining the new DTV allocation scheme<sup>21</sup> and it has become the standard alternative prediction method. For example, the Commission recognized the usefulness of such studies in the television market modification context:

The Longley-Rice model provides a more accurate representation of a station's technical coverage area because it takes into account such factors as mountains and valleys that are not specifically reflected in a traditional Grade B contour analysis. In situations involving mountainous terrain or other unusual geographical features, Longley-Rice propagation studies can aid in determining whether or not a television station actually provides local service to a community under factor two of the market modification test.<sup>22</sup>

"Studies of this type have been increasingly used elsewhere in the Commission's processes to reflect signal propagation and thus warrant[s] consideration here."<sup>23</sup>

These statements hold equally true in the radio context. The Engineering Statement submitted herewith demonstrates through use of the Longley-Rice Model that a short spaced Class A allocation KMIH(FM) on Channel 283 at Mercer Island is contour protected and that the allocation may be granted consistent with the Commission's rules.

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<sup>20</sup> See Engineering Statement.

<sup>21</sup> See *Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, 13 FCC Rcd 7418 (1998) ("we continue to believe that [the Longley-Rice model] provides a sufficiently accurate measure of service and interference. Furthermore, the Longley-Rice model is in the public domain and has been extensively documented, thereby ensuring that all parties using this model will be able to achieve the same results").

<sup>22</sup> *Arkansas 49, Inc. Petition For Modification of the Television Market of Television Station KYPX (TV)*, Camden, Arkansas, DA 03-3653, n.9 (MB 2003).

<sup>23</sup> *Petition of Channel 39, Inc.; For Modification of Television Market of Station WDZL, Miami, Florida*, 13 FCC Rcd 3108, para. 19 (CSB 1998).

Considering the valuable services KMIH(FM) provides to the Mercer Island Community -- services that it has been providing for over thirty years -- and given that it is one of only a few Superpowered grandfathered Class D stations still operating, rather than adopt the Joint Petitioners reallocation proposal, the Commission should instead adopt a special allocation granting KMIH(FM) the equivalent of Class A status and protection in accordance with the Class A minimum distance separations on channel 283 at Mercer Island, Washington.<sup>24</sup> Interestingly, in a separate docket, Joint Parties engineering consulting firm has supported the concept Mercer Island puts forth here. In comments submitted on October 20, 1998 in MM Docket No. 98-93 Du Treil, Lundin & Rackley, Inc. stated that "[t]he Commission should consider proposals for Class D stations to upgrade to Class A along the lines of one-step applications for processing purposes."<sup>25</sup>

Mercer Island has performed a study indicating that no alternative channel -- either in the reserved or non-reserved band -- exists.<sup>26</sup> Commission precedent provides for the reservation of a non-reserved channel for non-commercial educational use in situations similar to this.<sup>27</sup>

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<sup>24</sup> As the licensee of the station, MISD will apply for the channel and construct the facility as authorized.

<sup>25</sup> Comments of Du Treil, Lundin & Rackley, Inc. ("DLR") in the Matter of 1998 Biennial Regulatory Review -- Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission's Rules MM Docket No. 98-93, page 6, submitted October 22, 1998. DLR likewise supports application of the Longley-Rice model to the FM broadcast service. See Reply Comments of Du Treil, Lundin & Rackley, Inc. in the Matter of 1998 Biennial Regulatory Review -- Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission's Rules MM Docket No. 98-93, submitted December 4, 1998 ("It would seem logical to extend the extensive work in the television broadcasting service using the Longley-Rice model to the FM broadcasting service").

<sup>26</sup> Exhibit D hereto.

<sup>27</sup> See *Bronson, Michigan*, DA 91-790 (Allocations Branch 1991); *Butte, Montana*, 9 FCC Rcd 2180 (Allocations Branch 1994); *Buhl, Minnesota*, 9 FCC Rcd 2180 (Allocations Branch, 1994).

Moreover, the Commission's more recent action in MM Docket 95-31<sup>28</sup> further supports a grant of the requested Channel 283A allocation at Mercer Island. There, the Commission reaffirmed the relaxed reservation standard adopted in the Report and Order "which [will] enable would-be applicants for NCE stations in the full-power FM and TV services to add to the number of channels reserved for their use when they demonstrate that they are technically precluded from using an already-reserved channel, and they will provide needed NCE service in a given area."<sup>29</sup>

As demonstrated in the technical study attached in Exhibit D (submitted previously in this docket as an attachment to Mercer Island's original comments), no alternative channel – either in the reserved or non-reserved band – exists. Accordingly, to maintain its operations, KMIH(FM) must remain on channel 283.

Furthermore, KMIH(FM) provides a first local NCE service to at least ten percent of the population within the proposed station's service area and that such population is at least 2000 persons. Exhibit A hereto demonstrates that KMIH provides 60 dBu service to all of Mercer Island. Mercer Island has a 2000 Census population of 22,036.

This proposed allocation will result not only in a preferential arrangement of allotments, but one far superior to that proposed by the Joint Petitioners.

"The ultimate touchstone for the FCC is ... the distribution of service, rather than of licenses or stations; the constituency to be served is people, not municipalities."<sup>30</sup> Adoption

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<sup>28</sup> *Reexamination of the Comparative Standard for Noncommercial Educational Applicants* ("Second Report & Order"), 18 FCC Rcd 6691 (2003).

<sup>29</sup> *Second Report & Order*, 18 FCC Rcd at para. 1.

<sup>30</sup> *National Association of Broadcasters v. FCC*, 740 F.2d 1190 (D.C. Cir. 1984).

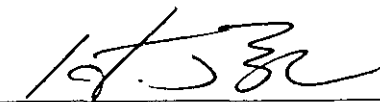


of this counterproposal will result in a preferential arrangement of allotments since it will serve to preserve the longstanding – truly local -- first local service KMIH(FM) has provided to the citizens of Mercer Island.

Respectfully submitted,

**MERCER ISLAND SCHOOL DISTRICT**

By: \_\_\_\_\_



Howard J. Barr  
Its Counsel

**WOMBLE CARLYLE SANDRIDGE & RICE, PLLC**

1401 Eye Street, N.W.  
Seventh Floor  
Washington, D.C. 20005  
(202)857-4506

February 2, 2004

**EXHIBIT A**



**Engineering Statement**  
On Behalf of Mercer Island School District #400  
Calculation of Interfering Signal Contour

We have been asked by station KMIH, Mercer Island School District #400, Mercer Island, WA to provide an alternative analysis of the interference caused the station by KAFE, Bellingham, WA, a class C station. For the purpose of this examination we used the KMIH construction permit parameters, (see BMPED 20020517ABD) which amends the station's licensed coordinates by four longitudinal seconds.

First, we determined if this situation called for the use of an alternative prediction method from the Commission's standard. The Commission has set a policy that it will not entertain alternative showings unless the terrain can be shown to range widely from the expect norm under which the F(50-10) and F(50-50) tables were developed. The norm ranges from a delta h of under 20 meters (flat) to one over 100 meters (rugged).

For this analysis, we chose to use the recently released USGS National Elevation Dataset 30-meter terrain elevation database. This database provides a significant improvement over the NGDC 30 arc-second and the USGS 03 arc-second terrain elevation datasets. The quotation below comes directly from the United States Geographical Survey National Elevation Dataset website:

"The USGS National Elevation Dataset (NED) has been developed by merging the highest-resolution, best-quality elevation data available across the United States into a seamless raster format. NED is the result of the maturation of the USGS effort to provide 1:24,000-scale Digital Elevation Model (DEM) data for the conterminous US and 1:63,360-scale DEM data for Alaska."

In order to make the size of this database more workable, we scaled the database to 3-arc seconds by extracting every third point.

Attachment A is a calculation of the Delta h of KAFE along the entire path toward KMIH. The delta h of this path is 110.5 meters.

### FCC Method:

The 54 dBu, F(50-10) contour of 1<sup>st</sup> adjacent KAFE can be seen on attachment B as crossing over the KMIH transmitter site, approximately bisecting the KMIH 60 dBu protected signal contour.<sup>1</sup> The FCC method is known for its weaknesses, especially as it relates to calculation of real world interference signal contours. The reasons for this are many; however perhaps the largest reason is the way the method considers terrain. The method assumes the terrain along the path will fall into the norm assumed when the tables were originally conceived and the terrain beyond 16 kilometers from the transmitter is not considered. The attenuating impact of drastically changing terrain and mountains and hills beyond 16 kilometers is ignored.

### Alternative Method:

In the mid-sixties, the National Bureau of Standards published "*Technical Note 101*". P. L. Rice, A. G. Longley, A. Norton and A. P. Barsis authored this two-volume propagation treatise in the course of their work at the Institute for telecommunications Sciences and Aeronomy at Boulder, Colorado. The concepts expressed in these documents were incorporated into a series of computer routines that came to be known as the "Longley-Rice Model". This model has been employed by the Commission to determine the new DTV allocation scheme. It has now become the standard alternative prediction method. Going well beyond the FCC curves, the Longley-Rice method considers atmospheric absorption including absorption by water vapor and Oxygen, loss due to sky-noise temperature and attenuation caused by rain and clouds. It considers terrain roughness, knife-edge, (with and without ground-reflections), loss due to isolated obstacles, diffraction, forward scatter and long-term power fading. The Longley-Rice Model is also known as the Irregular Terrain Model (ITM.) Our application of this model uses Version 1.2.2 of the Irregular Terrain Model.

Using the NED terrain elevation dataset, we applied the Longley-Rice propagation model. Also applied were TSB-88 standard land attenuation values for the land use type ((based on the USGS database) and the frequency in use. These were as follows:

<i>Land use type</i>	<i>Attenuation in dB</i>
Open Land	2.0
Agricultural	2.5
Water	0.0
Forest	5.5
Wetland	2.0
Urban	10.0
Snow & Ice	0.0

<sup>1</sup> The NGDC 30-arc second terrain database set was used for all FCC method calculations

Unknown	0.0
---------	-----

The map included in attachment B shows that the 54 dBu interference signal contour, based on the mean occurrence calculated 10% Longley-Rice signal, does not cross over land either the FCC calculated F(50-50) 60 dBu contour or the Longley-Rice, mean occurrence calculated 50% 60 dBu contour of the KMIH CP facility. Attachment C shows the same contours using a smaller zoomed-in scale. Attachment D contains distance to contour tables confirming the distances plotted on the maps.

Based on this analysis, our conclusion is that no interference will be caused KMIH within its protected 60 dBu signal contour by 1<sup>st</sup> adjacent KAFE, Bellingham, WA.

Attachment E is a statement of my qualifications.

Doug Vernier  
January 3, 2004

WFE , Saga Broadcasting, Llc , BLH4978

140 48 N.  
12 50 24 W.  
Azimuth of radial= 160°  
Delta h= 110.5M, Interval=.1, COR AMSL= 748 M M, Interval= .1  
Attenuation= -2.6 dB  
Radial length = 131.36 km

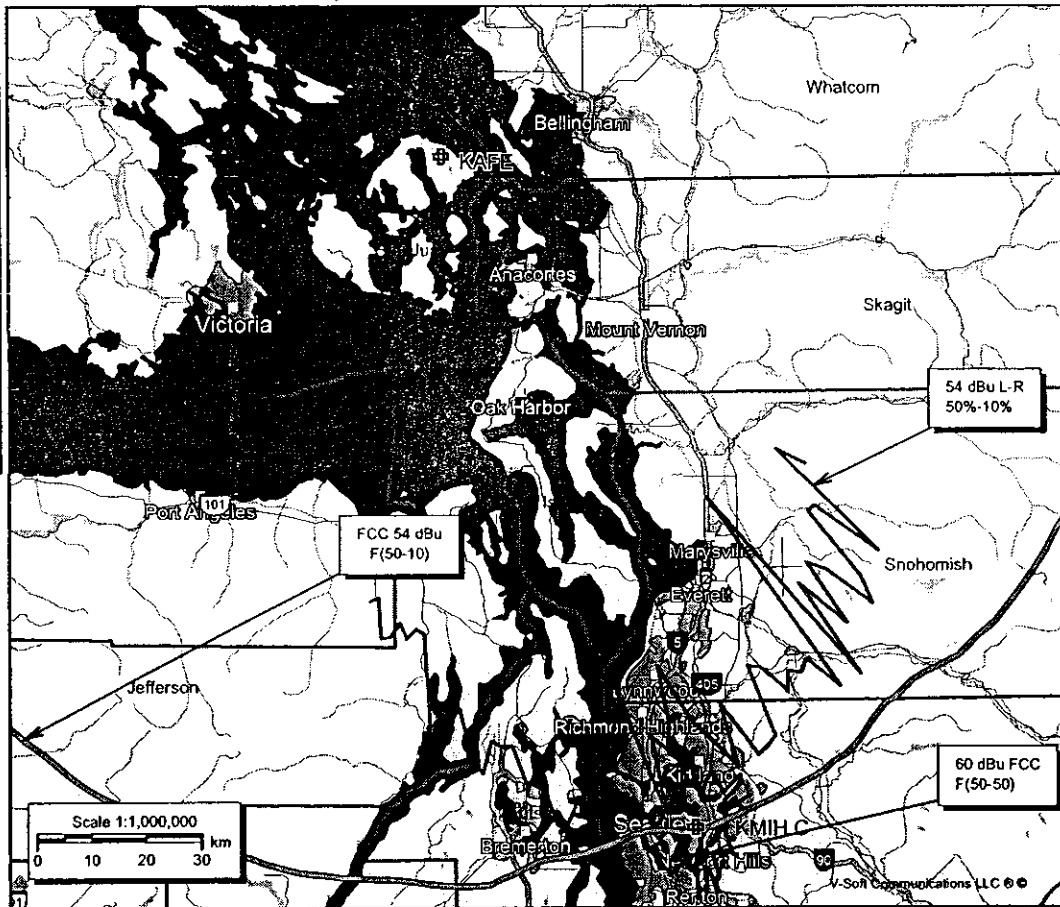
00.0	687.08	000.1	681.18	000.2	675.31	000.3	664.57	000.4	656.88	000.5	660.88
00.6	661.92	000.7	660.26	000.8	655.08	000.9	650.71	001.0	650.39	001.1	650.69
01.2	655.78	001.3	662.24	001.4	664.41	001.5	670.01	001.6	686.00	001.7	692.17
01.8	682.32	001.9	675.19	002.0	668.73	002.1	658.58	002.2	622.25	002.3	582.11
02.4	557.51	002.5	544.02	002.6	528.40	002.7	489.24	002.8	437.79	002.9	406.77
03.0	378.51	003.1	346.63	003.2	321.23	003.3	300.89	003.4	280.59	003.5	249.31
03.6	228.90	003.7	219.79	003.8	218.68	003.9	218.89	004.0	226.19	004.1	244.56
04.2	260.65	004.3	269.01	004.4	272.75	004.5	265.72	004.6	252.95	004.7	230.85
04.8	220.04	004.9	221.66	005.0	223.86	005.1	236.21	005.2	232.91	005.3	207.34
05.4	193.14	005.5	170.24	005.6	137.72	005.7	102.11	005.8	52.58	005.9	33.61
06.0	54.52	006.1	59.80	006.2	52.88	006.3	53.78	006.4	59.02	006.5	66.01
06.6	69.35	006.7	61.44	006.8	46.55	006.9	31.97	007.0	11.48	007.1	0.81
07.2	0.00	007.3	0.00	007.4	0.00	007.5	0.00	007.6	0.00	007.7	0.00
07.8	0.00	007.9	0.00	008.0	0.00	008.1	0.00	008.2	0.00	008.3	0.00
08.4	0.00	008.5	0.00	008.6	0.00	008.7	0.00	008.8	2.07	008.9	4.38
09.0	2.16	009.1	0.00	009.2	0.00	009.3	0.00	009.4	0.00	009.5	0.00
09.6	0.00	009.7	0.00	009.8	0.00	009.9	0.00	010.0	0.00	010.1	0.00
10.2	0.00	010.3	0.00	010.4	0.00	010.5	0.00	010.6	0.00	010.7	0.00
10.8	0.00	010.9	0.00	011.0	0.00	011.1	0.00	011.2	0.00	011.3	0.00
11.4	0.00	011.5	0.00	011.6	0.00	011.7	0.00	011.8	0.00	011.9	0.00
12.0	0.00	012.1	0.00	012.2	0.00	012.3	0.00	012.4	0.00	012.5	0.00
12.6	0.00	012.7	0.01	012.8	0.79	012.9	1.67	013.0	16.88	013.1	41.78
13.2	47.03	013.3	47.40	013.4	64.89	013.5	70.48	013.6	79.40	013.7	93.05
13.8	111.49	013.9	141.42	014.0	177.05	014.1	191.16	014.2	191.04	014.3	187.00
14.4	176.23	014.5	156.36	014.6	120.69	014.7	66.55	014.8	17.15	014.9	0.96
15.0	0.00	015.1	0.00	015.2	0.00	015.3	0.00	015.4	0.00	015.5	0.00
15.6	0.00	015.7	0.00	015.8	0.00	015.9	0.00	016.0	0.00	016.1	0.00
16.2	0.00	016.3	0.00	016.4	0.00	016.5	0.00	016.6	0.00	016.7	0.00
16.8	0.00	016.9	0.00	017.0	0.00	017.1	0.00	017.2	0.00	017.3	0.00
17.4	0.00	017.5	0.00	017.6	0.00	017.7	0.00	017.8	0.00	017.9	0.00
18.0	0.00	018.1	0.00	018.2	0.00	018.3	0.00	018.4	0.00	018.5	0.00
18.6	0.00	018.7	0.00	018.8	0.00	018.9	0.00	019.0	0.00	019.1	0.00
19.2	0.00	019.3	0.00	019.4	0.00	019.5	0.00	019.6	0.00	019.7	0.00
19.8	0.00	019.9	0.00	020.0	0.00	020.1	0.00	020.2	0.00	020.3	0.00
20.4	0.00	020.5	0.00	020.6	0.00	020.7	0.00	020.8	0.00	020.9	0.00
21.0	0.00	021.1	0.00	021.2	0.00	021.3	0.00	021.4	0.00	021.5	0.00
21.6	0.00	021.7	0.00	021.8	0.00	021.9	0.00	022.0	0.00	022.1	0.00
22.2	0.00	022.3	0.00	022.4	0.00	022.5	0.00	022.6	0.00	022.7	0.00
22.8	0.00	022.9	0.00	023.0	0.00	023.1	0.00	023.2	0.00	023.3	0.00
23.4	0.00	023.5	0.00	023.6	0.00	023.7	0.00	023.8	0.00	023.9	0.00
24.0	0.00	024.1	0.00	024.2	0.00	024.3	0.00	024.4	0.00	024.5	0.00
24.6	0.00	024.7	0.00	024.8	0.00	024.9	0.00	025.0	0.00	025.1	0.00
25.2	0.00	025.3	0.00	025.4	0.00	025.5	0.00	025.6	0.00	025.7	0.00
25.8	0.00	025.9	0.00	026.0	0.00	026.1	0.00	026.2	0.00	026.3	0.00
26.4	0.00	026.5	0.00	026.6	0.00	026.7	0.00	026.8	0.00	026.9	0.00
27.0	0.00	027.1	0.00	027.2	0.00	027.3	0.00	027.4	0.00	027.5	0.00
27.6	0.00	027.7	0.00	027.8	0.00	027.9	0.00	028.0	0.00	028.1	0.00
28.2	0.00	028.3	0.00	028.4	0.00	028.5	0.00	028.6	0.00	028.7	0.00
28.8	0.00	028.9	0.00	029.0	0.00	029.1	0.00	029.2	0.00	029.3	0.00
29.4	0.00	029.5	0.00	029.6	0.00	029.7	0.00	029.8	0.00	029.9	0.00
30.0	0.00	030.1	0.00	030.2	0.00	030.3	0.00	030.4	0.00	030.5	0.00
30.6	0.00	030.7	0.00	030.8	0.00	030.9	0.00	031.0	0.00	031.1	0.00
31.2	0.00	031.3	0.00	031.4	0.00	031.5	0.00	031.6	0.00	031.7	0.00
31.8	0.00	031.9	0.00	032.0	0.00	032.1	0.00	032.2	0.00	032.3	0.00
32.4	0.00	032.5	0.00	032.6	0.00	032.7	0.00	032.8	0.00	032.9	0.00
33.0	0.00	033.1	0.00	033.2	0.00	033.3	0.00	033.4	0.00	033.5	0.00
33.6	0.00	033.7	0.00	033.8	0.00	033.9	0.00	034.0	0.00	034.1	0.00
34.2	0.00	034.3	0.00	034.4	0.00	034.5	0.00	034.6	0.00	034.7	0.00
34.8	0.00	034.9	0.00	035.0	0.00	035.1	0.00	035.2	0.00	035.3	0.00
35.4	0.00	035.5	0.00	035.6	0.00	035.7	0.00	035.8	0.00	035.9	0.00
36.0	0.00	036.1	0.00	036.2	0.00	036.3	0.00	036.4	0.00	036.5	0.00

36.6	0.00	036.7	0.00	036.8	0.00	036.9	0.00	037.0	0.00	037.1	0.00
37.2	0.00	037.3	0.22	037.4	2.93	037.5	5.66	037.6	6.77	037.7	8.02
37.8	8.69	037.9	9.36	038.0	10.63	038.1	11.34	038.2	12.01	038.3	13.22
38.4	13.80	038.5	14.00	038.6	13.20	038.7	12.18	038.8	10.39	038.9	9.15
39.0	7.22	039.1	6.15	039.2	6.00	039.3	6.00	039.4	5.08	039.5	5.01
39.6	5.00	039.7	4.03	039.8	5.79	039.9	4.00	040.0	4.02	040.1	6.51
40.2	8.02	040.3	8.48	040.4	7.00	040.5	7.00	040.6	7.22	040.7	7.77
40.8	8.45	040.9	9.87	041.0	10.48	041.1	11.94	041.2	13.42	041.3	16.61
41.4	20.60	041.5	25.16	041.6	31.31	041.7	37.54	041.8	37.00	041.9	36.38
42.0	36.37	042.1	37.63	042.2	42.11	042.3	48.40	042.4	51.71	042.5	54.76
42.6	58.04	042.7	60.70	042.8	62.31	042.9	62.80	043.0	63.14	043.1	63.44
43.2	64.04	043.3	62.98	043.4	59.38	043.5	55.47	043.6	53.43	043.7	51.69
43.8	51.61	043.9	53.87	044.0	56.00	044.1	56.73	044.2	57.36	044.3	58.65
44.4	58.92	044.5	58.81	044.6	58.49	044.7	58.75	044.8	58.26	044.9	57.13
45.0	56.23	045.1	53.75	045.2	51.91	045.3	53.43	045.4	55.31	045.5	56.84
45.6	56.14	045.7	54.02	045.8	52.33	045.9	50.76	046.0	46.66	046.1	33.15
46.2	14.93	046.3	3.17	046.4	3.82	046.5	3.37	046.6	3.83	046.7	4.35
46.8	7.88	046.9	13.64	047.0	18.30	047.1	22.10	047.2	23.07	047.3	11.30
47.4	0.00	047.5	0.00	047.6	0.00	047.7	0.00	047.8	0.00	047.9	0.00
48.0	0.00	048.1	0.00	048.2	0.00	048.3	0.00	048.4	0.00	048.5	0.00
48.6	0.00	048.7	0.00	048.8	0.00	048.9	0.00	049.0	0.00	049.1	0.00
49.2	0.00	049.3	0.00	049.4	0.00	049.5	0.00	049.6	0.00	049.7	0.00
49.8	0.00	049.9	0.00	050.0	0.00						

# L-R Study, NED Terrain 03 arc-second, Land Cover - Attachment B

KAFE  
BLH4978  
Latitude: 48-40-48 N  
Longitude: 122-50-24 W  
ERP: 60.00 kW  
Channel: 282  
Frequency: 104.3 MHz  
AMSL Height: 748.0 m  
Elevation: 684.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: Longley/Rice  
Climate: Cont temperate  
Conductivity: 0.0040  
Dielec Const: 15.0  
Refractivity: 311.0  
Receiver HI AG: 9.1 m  
Receiver Gain: 0 dB  
Time Variability: 10.0%  
Sit. Variability: 50.0%  
ITM Mode: Broadcast

KMIH.C  
BMPED20020517ABD  
Latitude: 47-34-21 N  
Longitude: 122-13-01 W  
ERP: 0.03 kW  
Channel: 283  
Frequency: 104.5 MHz  
AMSL Height: 131.0 m  
Elevation: 101.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No

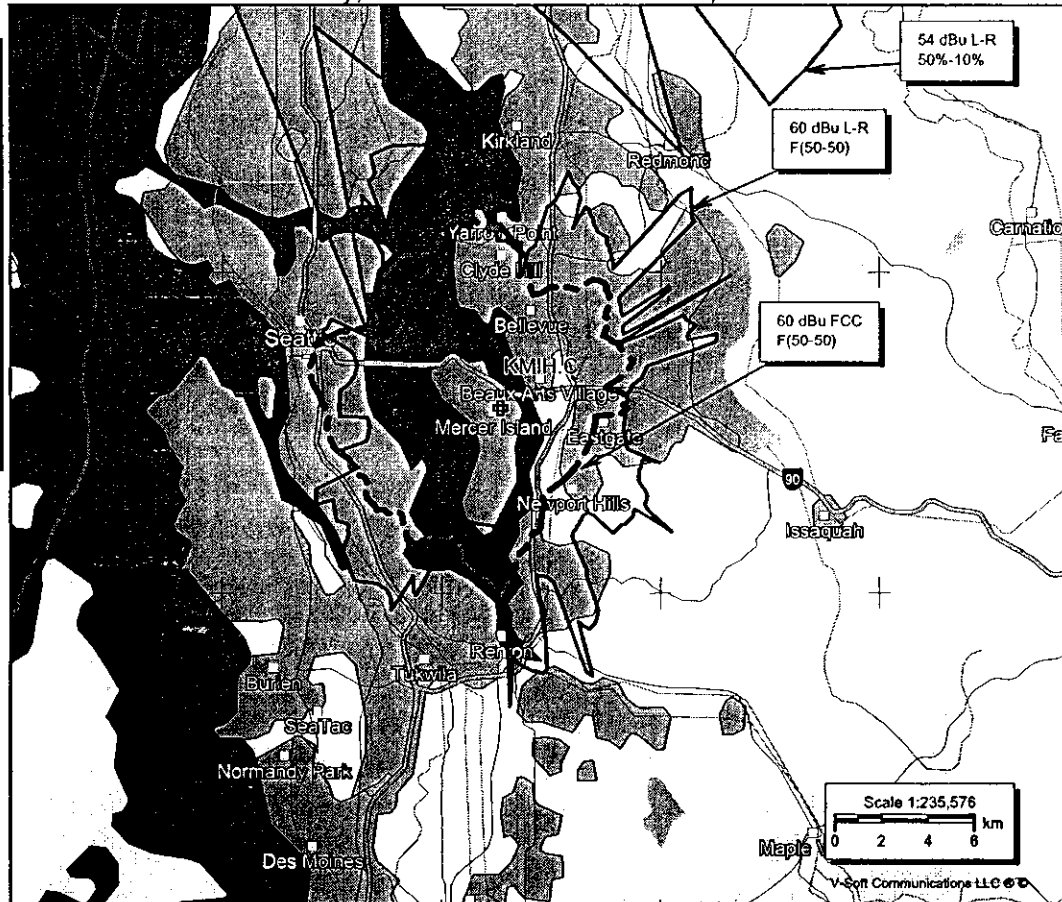




# L-R Study, NED Terrain 03 arc-second, Land Cover - Attachment C

KAFE  
BLH4978  
Latitude: 48-40-48 N  
Longitude: 122-50-24 W  
ERP: 60.00 kW  
Channel: 282  
Frequency: 104.3 MHz  
AMSL Height: 748.0 m  
Elevation: 684.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: Longley/Rice  
Climate: Cont temperate  
Conductivity: 0.0040  
Dielec Const: 15.0  
Refractivity: 311.0  
Receiver Ht AG: 9.1 m  
Receiver Gain: 0 dB  
Time Variability: 10.0%  
Sit. Variability: 50.0%  
ITM Mode: Broadcast

KMIH.C  
BMPED20020517ABD  
Latitude: 47-34-21 N  
Longitude: 122-13-01 W  
ERP: 0.03 kW  
Channel: 283  
Frequency: 104.5 MHz  
AMSL Height: 131.0 m  
Elevation: 101.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No



Call Letters: KAFB  
 File Number: BLH4978  
 Latitude: 48-40-48 N  
 Longitude: 122-50-24 W  
 ERP: 60.00 kW  
 Channel: 282  
 Frequency: 104.3 MHz  
 AMSL Height: 748.0 m  
 Elevation: 684.0 m  
 HAAT: 704.0 m  
 Horiz. Antenna Pattern: Omni  
 Vert. Elevation Pattern: No

Attachment D

Type of contour: FCC  
 Location Variability: 50.0 %  
 Time Variability: 10.0 %  
 Radials are spaces 1 degree  
 Field Strength: 54.00 dBuV/m

Bearing (deg)	Distance (km)
-----	-----
130.0	132.4
131.0	132.3
132.0	132.1
133.0	131.8
134.0	131.4
135.0	130.8
136.0	130.2
137.0	129.8
138.0	129.6
139.0	129.5
140.0	129.5
141.0	129.6
142.0	130.0
143.0	130.7
144.0	131.4
145.0	132.0
146.0	132.4
147.0	132.6
148.0	132.8
149.0	132.8
150.0	132.8
151.0	132.8
152.0	132.8
153.0	132.8
154.0	132.7
155.0	132.7
156.0	132.7
157.0	132.7
158.0	132.5
159.0	132.2
160.0	131.5
161.0	130.8
162.0	130.1
163.0	129.6
164.0	129.5
165.0	129.8
166.0	130.1
167.0	130.3
168.0	130.4
169.0	130.5
170.0	130.6
171.0	130.6
172.0	131.1
173.0	132.0
174.0	132.8

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175.0	133.2
176.0	133.4
177.0	133.5
178.0	133.5
179.0	133.4
180.0	133.3
181.0	133.3
182.0	133.3
183.0	133.4
184.0	133.4
185.0	133.5
186.0	133.5
187.0	133.4
188.0	133.4
189.0	133.5

Call Letters: KAFE  
File Number: BLH4978  
Latitude: 48-40-48 N  
Longitude: 122-50-24 W  
ERP: 60.00 kW  
Channel: 282  
Frequency: 104.3 MHz  
AMSL Height: 748.0 m  
Elevation: 684.0 m  
HAAT: 704.0 m  
Horiz. Antenna Pattern: Omni  
Vert. Elevation Pattern: No

Type of contour: Longler-Rice Signal Calculated  
Radial spacing = 1 degree  
Using the mean occurrence method at 54.0 dBu

Bearing (deg)	Distance (km)
-----	-----
130.0	87.1
131.0	81.2
132.0	107.8
133.0	93.5
134.0	93.3
135.0	108.7
136.0	113.8
137.0	103.4
138.0	100.1
139.0	113.4
140.0	102.1
141.0	122.2
142.0	78.9
143.0	121.8
144.0	114.1
145.0	115.6
146.0	113.9
147.0	117.0
148.0	110.6
149.0	109.2
150.0	122.8
151.0	123.7
152.0	124.3
153.0	112.9
154.0	124.6
155.0	118.4
156.0	113.7
157.0	101.6
158.0	112.1
159.0	116.7
160.0	113.4
161.0	127.4
162.0	98.8
163.0	109.1
164.0	112.6
165.0	110.0
166.0	124.4
167.0	120.7
168.0	121.1
169.0	124.3
170.0	124.7
171.0	113.4
172.0	117.1
173.0	109.0
174.0	109.0
175.0	107.8
176.0	113.6

177.0	111.3
178.0	101.6
179.0	102.3
180.0	102.2
181.0	105.7
182.0	88.0
183.0	86.9
184.0	88.8
185.0	86.2
186.0	88.9
187.0	89.3
188.0	81.9
189.0	82.7

Call Letters: KMIH.C  
File Number: BMPED20020517ABD  
Latitude: 47-34-21 N  
Longitude: 122-13-01 W  
ERP: 0.03 kW  
Channel: 283  
Frequency: 104.5 MHz  
AMSL Height: 131.0 m  
Elevation: 101.0 m  
Horiz. Antenna Pattern: Omni  
Vert. Elevation Pattern: No

Type of contour: FCC  
Location Variability: 50.0 %  
Time Variability: 50.0 %  
# of Radials Calculated: 8  
Field Strength: 60.00 dBuV/m

Bearing (deg)	Distance (km)	HAAT (m)
-----	-----	-----
0.0	8.13	113.2
45.0	6.26	67.8
90.0	4.27	32.0
135.0	4.14	-19.9
180.0	7.29	91.8
225.0	6.11	64.5
270.0	7.55	98.2
315.0	7.37	93.8

Call Letters: KMIH.C  
File Number: BMPED20020517ABD  
Latitude: 47-34-21 N  
Longitude: 122-13-01 W  
ERP: 0.03 kW  
Channel: 283  
Frequency: 104.5 MHz  
AMSL Height: 131.0 m  
Elevation: 101.0 m  
HAAT: 69.0 m  
Horiz. Antenna Pattern: Omni  
Vert. Elevation Pattern: No

Type of contour: Signal Calculated Longley-Rice  
# of Radials Calculated: 36  
Using the mean occurrence method at 60.0 dBu

Bearing (deg)	Distance (km)
-----	-----
0.0	7.2
10.0	6.9
20.0	9.9
30.0	8.7
40.0	12.0
50.0	6.8
60.0	11.4
70.0	8.6
80.0	5.8
90.0	5.4
100.0	5.4
110.0	6.5
120.0	7.3
130.0	7.4
140.0	5.9
150.0	6.3
160.0	9.9
170.0	11.6
180.0	5.3
190.0	5.1
200.0	7.1
210.0	9.4
220.0	9.8
230.0	8.5
240.0	8.3
250.0	6.8
260.0	5.7
270.0	6.9
280.0	6.5
290.0	6.7
300.0	5.4
310.0	5.7
320.0	7.9
330.0	11.3
340.0	12.0
350.0	11.6

**Declaration:**

I, Douglas L. Vernier, declare that I have received training as an engineer from the University of Michigan School of Engineering. That, I have received degrees from the University in the field of Broadcast Telecommunications. That, I have been active in broadcast consulting for over 30 years;

That, I have held a Federal Communications Commission First Class Radiotelephone License continually since 1964. In 1985, this license was reissued by the Commission as a lifetime General Radiotelephone license no. PG-16-16464;

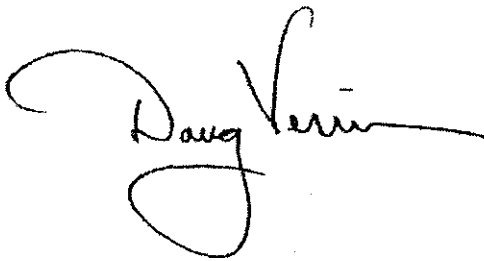
That, I am certified as a Professional Broadcast Engineer (#50258) by the Society of Broadcast Engineers, Indianapolis, Indiana. (Re-certified 10/2000.)

That, my qualifications are a matter of record with the Federal Communications Commission;

That, I have been retained Mercer Island School District # 400 to prepare the engineering showings appended hereto:

That, I have prepared these broadcast engineering showings, the technical information contained in same and the facts stated within are true of my knowledge;

That, under penalty of perjury, I declare that the foregoing is correct.

A handwritten signature in black ink, appearing to read "Doug Vernier", with a large, stylized loop at the end.

\_\_\_\_\_  
Douglas L. Vernier

Executed on January 22, 2004



## **EXHIBIT B**

Arbitron Data

Page 1 of 1

**RRC Radio Research Consortium**

These data are provided for use by Arbitron subscribers ONLY, in accordance with RRC's limited license with Arbitron Inc. (**see rules**)

Monday-Sunday 6AM-Midnight Persons 12+

Data Copyright Arbitron Inc

**ARBITRON FALL 2003 TOP-LINE ESTIMATES**

Metro Rank	Metro Survey Area				Total Market		
	AQH Persons (00)	AQH Share %	Cume Persons (00)	Cume Rating %	AQH Persons (00)	Cume Persons (00)	Avg TSL (hrs)
14 <b>Seattle-Tacoma</b>							
* KMIH	10	0.2	411	1.3	10	411	3.1

\* Other non-CPB Station

## **EXHIBIT C**

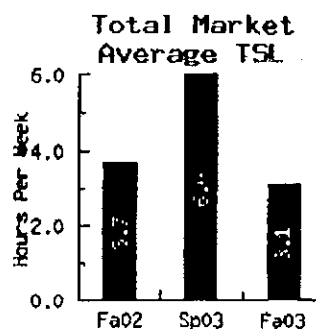
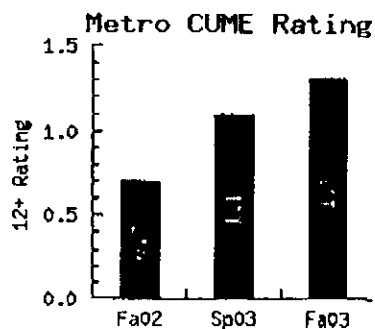
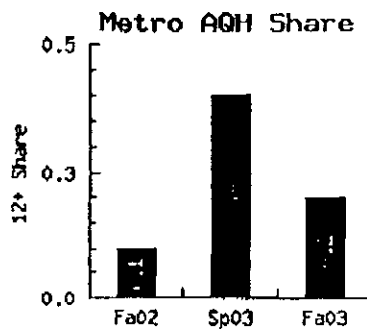
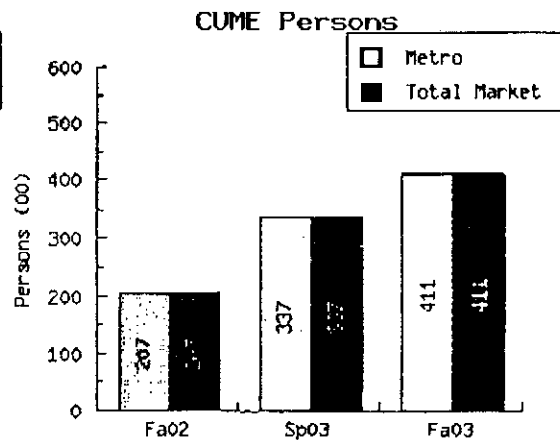
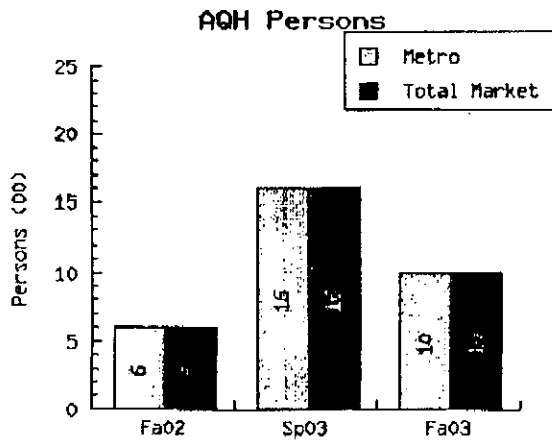


**Topline - Graphs with Trends**  
**Arbitron Radio Listening Estimates**  
**Persons 12+, Mon-Sun 6a-12m**

Data © Arbitron, Inc.

KMIH - Seattle-Tacoma

Survey Period	METRO				TOTAL MARKET		
	AQH		CUME		AQH	CUME	Avg TSL
	Persons(00)	Share	Persons(00)	Rating	Persons(00)	Hrs/Week	
Fa02	6	0.1	207	0.7	6	207	3.7
Sp03	16	0.4	337	1.1	16	337	6.0
Fa03	10	0.2	411	1.3	10	411	3.1



Audience research for non-commercial radio since 1981  
 Box 1309 Olney MD 20830 \* Phone:301-774-6686 \* Fax:301-774-0976  
 E-mail:RRC@RROnline.org \* Web Site:www.RROnline.org

## EXHIBIT D

**McCLANATHAN and ASSOCIATES, INC.**  
**PROFESSIONAL ELECTRICAL ENGINEERS**  
**P.O. BOX 939 - PORTLAND, OR 97207-0939**  
**TEL: 503-246-8080 FAX: 503-246-6304**

**Facsimile Delivery Cover Sheet**

**DATE:** July 19, 2002  
**TO:** Please deliver immediately to: Nick De Vogel  
**Firm:** Mercer Island School District #400  
Radio Station KMIH  
**FAX No.** 206-236-3342

This communication must be delivered only to the above addressee. Any unauthorized use or disclosure is strictly prohibited.

**FROM:** Robert A. McClanathan, P.E.

Number of pages including cover sheets: 2

**MESSAGE**

Nick De Vogel:

At your request, I have completed the FM channel search for KMIH with Class D operation and 30 watts ERP antenna power. The results are negative. All commercial channels from 221 to 300, as well as the Non-Commercial Educational channels 200 to 220, were researched for potential operation with a Class D 10 watt transmitter power.

You are aware that if a Class D FM station must change frequency it must first attempt to locate on one of the commercial channels 221 to 300 as stated in FCC Rule 47 CFR Section 73.512. If such a commercial channel is not available the station must then operate on channel 200 (87.9 MHz) provided it is greater than 250 miles from the Canadian border and no interference to any channel 6 TV station would be caused. If the previous two options fail, the Class D may then operate on one of the 20 NCE channels if available.

The interference protection guidelines Class D stations must comply with, in all cases, are given in 47 CFR Section 73.509(b). Using this protection requirement, all channels from 201 to 300 were researched and the only available channel is your existing frequency 104.5 MHz, channel 283.

The current FCC database show an enormous number of applications for new Low Power FM stations on channels 282 and 283 throughout the greater Seattle area. This FCC database, as of today, does not indicate which one of these many applicants will be granted the LPFM license. Obviously, if the successful applicant is near the KMIH antenna site, KMIH will be shut down. However, it may be possible that if the LPFM station is further away, perhaps 10 miles and depending on intervening terrain, KMIH may not be impacted and could continue to operate. This can not be determined until the successful application for this LPFM stations has been selected by the FCC.

I expect you will not proceed to change your licensed operation as granted in the FCC C.P. dated August 30, 2001 until the LPFM issue has been resolved. Your FCC C.P. does have special operating conditions attached, No. 2, that will be somewhat expensive to comply with. This condition is a result of your 40 meter high tower being in the vicinity of two AM stations. I have to make field strength measurements often to assist stations in complying with these same permit conditions.

Please call me if you need any additional information or research services. I'll send you a printed copy of the channel search by US Mail to your 9100 SE 42nd Street address. The total expenses to date are \$460 and I will include an invoice with this mailing.

Sincerely,



Bob McClanathan, P.E.

**McCLANATHAN and ASSOCIATES, INC.**

PROFESSIONAL ELECTRICAL ENGINEERS  
P.O. BOX 939 - PORTLAND, OREGON 97207-0939  
TEL: (503) 246-9080 FAX: (503) 246-6304

**FM CHANNEL STUDY**

Proposed Site: KMIH FM, Mercer Island. Ch. 283D  
47-34-21N, 122-13-01W, 30W ERP, 69m HAAT

**EXISTING STATIONS OVERLAYING PROPOSED SITE WITH 60 DBU CONTOUR.**

(-) Indicates lower adjacent channel preclusion

(+) Indicates higher adjacent channel preclusion

CH.	Existing Station	City	Distance Miles	ERP kW	N. Lat.	W. Long.
201	+					
202	+					
203	KPLU-FM	Tacoma	5.52	50	47-32-35N	122-06-25W
204	-					
205	- +					
206	- +					
207	+					
208	KNHC	Seattle	8.95	30	47-41-26N	122-17-45W
209	- +					
210	- +					
211	- +					
212	KEXP-FM	Seattle	5.20	0.72	47-36-58N	122-18-28W
213	-					
214	- +					
215	- +					
216	+					
217	KBCS	Bellevue	5.20	7.9	47-35-07N	122-08-39W
218	-					
219	-					
220	- +					



221	+					
222	+					
223	KLSY-FM	Bellevue	12.25	58.3	47-30-14N	121-58-29W
224	- +					
225	- +					
226	- +					
227	KUBE	Seattle	5.47	100	47-32-40N	122-06-26W
228	- +					
229	- +					
230	- +					
231	KMPS-FM	Seattle	12.53	69	47-30-17N	121-58-04W
232	- +					
233	- +					
234	- +					
235	KUOW	Seattle	5.20	100	47-36-58N	122-18-28W
236	- +					
237	- +					
238	- +					
239	KBTB	Seattle	5.47	100	47-32-40N	122-06-26W
240	- +					
241	- +					
242	- +					
243	KYPT	Seattle	5.41	100	47-32-39N	122-06-32W
244	- +					
245	- +					
246	- +					
247	KBSG-FM	Tacoma	20.34	54	47-18-14N	122-23-43W
248	- +					

249	- +					
250	- +					
251	KING-FM	Seattle	12.25	58	47-30-14N	121-58-29W
252	- +					
253	- +					
254	- +					
255	KWJZ	Seattle	12.25	58	47-30-14N	121-58-29W
256	-					
257	- +					
258	- +					
259	+					
260	KISW	Seattle	12.25	58	47-30-14N	121-58-29W
261	- +					
262	- +					
263	- +					
264	KQBZ	Seattle	12.25	58	47-30-14N	121-58-29W
265	- +					
266	- +					
267	- +					
268	KPLZ	Seattle	5.47	99	47-32-40N	122-06-26W
269	-					
270	- +					
271	- +					
272	+					
273	KZOK-FM	Seattle	12.53	68	47-30-17N	121-58-04W
274	-					
275	-					
276	- +					

277	+					
278	+					
279	KMTT	Tacoma	12.25	58	47-30-14N	121-58-29W
280	-					
281	-					
282	-					
283	KMIX					
284	+					
285	+					
286	+					
287	KCMS	Edmonds	5.47	54	47-32-40N	122-06-26W
288	- +					
289	- +					
290	- +					
291	KBKS	Tacoma	12.53	68	47-30-17N	121-58-04W
292	- +					
293	- +					
294	- +					
295	KRWM	Bremerton	5.44	49	47-32-39N	122-06-29W
296	- +					
297	- +					
298	- +					
299	KNDD	Seattle	12.25	58	47-30-14N	121-58-29W
300	-					

**CERTIFICATE OF SERVICE**

I, Howard J. Barr, do hereby certify that I have on this 2<sup>nd</sup> day of February, 2004, caused to be hand delivered or mailed via First Class Mail, postage prepaid, copies of the foregoing Supplement to the following:

John A. Karousos \*  
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Policy and Rules Division  
Mass Media Bureau, Room 3-A266  
Federal Communications Commission  
The Portals  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

R. Barthen Gorman \*  
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Licensee of Station KLLM(FM)

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Mr. Robert Casserd  
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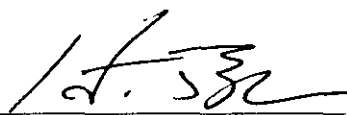
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Gig Harbor, WA 98335

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Mr. Rod Smith  
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Mr. Merle E. Dowd  
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Howard J. Barr

\* Hand Delivered